Cognitive consequences of multilingualism and age in the processing of markedness and ungrammaticality in L1

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In this presentation we will investigate speakers' acceptability of marked and/or ungrammatical constructions in their native language with respect to their mono- or multilingual status (cf. Kemp 2007; Dewaele & Wei 2013) and age. In our research we focused on the position of adverbs of frequency and the distribution of (reflexive) possessives in Polish, the participants' native language. Crucially, in both cases fully grammatical syntactic constructions were tested alongside marked (for adverbs of frequency) and ungrammatical (for possessives) constructions (1-2):

1a	Jan	rzadko	czyta	e-booki.	=unmarked, grammatical
	Jan	seldom	reads	e-books	
1b	Jan	czyta	rzadko	e-booki.	=**marked, grammatical**
	Jan	reads	seldom	e-books	
2a	Jan_1	znalazł	$swoje_1$	klucze.	=unmarked, grammatical
	Jan	found	self	keys	
2b	$*Jan_1$	znalazł	$jego_1$	klucze.	=**ungrammatical**
	Jan	found	his	keys	

A default, fully grammatical word order (a pre-verbal adverb) is shown in (1a), whereas (1b) shows a marked (but also grammatical) word order with a post-verbal adverb. As for possessives, Polish has reflexive possessives, which are used in the subject-oriented reading (2a), whereas possessive pronominals, as in (2b), are characterized by anti-subject orientation, which (prescriptively) prevents them from coreference with the subject.

The aim of the present study was to investigate the extent to which *multilingualism* and *age* influence the acceptability of grammatical vs. marked/ungrammatical sentences in the native language. We compared the performance of four groups of native speakers of Polish (N = 99), differing in their multilingual status (monolingual vs. multilingual) and age (young adult vs. middle-aged). In order to test participants' linguistic intuitions, we performed an acceptability judgement task (cf. Keating & Jegerski 2015), comprising 10 experimental items per condition, which were assessed on a 5-point Likert scale. This task was followed by a Cambridge General English placement test (https://www.cambridgeenglish.org/test-your-english/general-english/), whose aim was to verify the participants' knowledge of L2 English, thus operationalizing the degree of multilingualism.

We analyzed the data with a mixed-effects ordinal logistic regression model, using the R software (R Core Team 2022). We predicted *acceptability ratings* from *grammaticality* (grammatical [1a, 1b] vs. marked [1b] / ungrammatical [2b]), *English score* and *age* (both entered as continuous variables). We expected significant effects of *multilingualism* and *age* on *acceptability ratings* as a function of *grammaticality*. The analyses for possessive pronouns showed statistically significant results of *grammaticality* (β = -0.59, p < 0.001), which interacted with *age* for ungrammatical sentences (β = -0.14, p = 0.001). As for adverb placement, *grammaticality* did not play a significant role in acceptability ratings (β = -0.01, p = 0.95). However, there was a significant effect of *English score* (β = 0.18, p = 0.015), which interacted with *grammaticality* for marked sentences (β = -0.12, p = 0.002).

The results show that both multilingual status and younger age contribute to an increase in tolerance for the acceptability of marked/ungrammatical sentences. We hope that our study will contribute to the growing body of literature regarding cognitive changes in the perception of grammaticality in L1 under the influence of other languages known by the speakers (L2/L3/Ln).

References:

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